TRAIL & Landscape

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THE OTTAWA FIELD-NATURALISTS' CLUB

- Founded 1879 -

President: Mr. Hue MacKenzie, 228 Royal Ave., Ottawa
Secretary: Mr. A. W. Rathwell, Can. Wildlife Service

Objects of the Club: To foster an acquaintance with and love of nature and to encourage and publish original research in natural history.

Club Publications: THE CANADIAN FIELD-NATURALIST, official journal of the Club, devoted to the publishing of research in natural history. TRAIL & LANDSCAPE, a non-technical publication of general interest to local naturalists.

Field Trips, Lectures and other natural history activities are arranged for local members. See inside back cover.

Membership: Active membership ($5 annual fee) includes subscription to The Canadian Field-Naturalist. An Associate membership ($3 annual fee) is available to local naturalists, entitling them to join in field trips and similar Club activities. All Ottawa Valley members, both Active and Associate, receive TRAIL & LANDSCAPE; other members may receive it on request.

Application for Membership should be addressed to: Miss L. G. Howden, Treasurer, Box 3264 Postal Stn. C, Ottawa 3.

YOU ARE INVITED TO BECOME A MEMBER

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TRAIL & Landscape

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THE OTTAWA FIELD-NATURALISTS' CLUB

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A LONG HARD LOOK...

.....at the objects of our Club

"To foster an acquaintance with and love of nature, and to encourage and publish original research in natural history"....so runs an abbreviated version of the two avowed objects of our Club. With a revision of our constitution now under study, the time is right to cast an eye on these objectives, as laid down by an earlier generation. How well have we carried out our objectives? More to the point, do they strike at the problems and fulfil the needs of naturalists in 1968?

In critical mood, we look them over. The first objective concerns itself with those whose response to the world of nature is aesthetic. The second is concerned with those whose approach to natural history is academic.

Looking at the second goal first, there is no doubt that the Club has, over the years, fulfilled this objective ably and competently, thanks to the efforts of a number of dedicated members. There is an impressive accumulation of facts, in some eighty volumes of The Ottawa Naturalist and The Canadian Field-Naturalist, available to any researcher who wishes to make use of them. While financial support for The Canadian Field-Naturalist comes, in large part, from professional biologists and institutions around the world, a very sizable contribution comes from the Ottawa membership. It should be recognized that the majority of these members are not engaged in the formal study of biology, nor is their interest in natural history academic. Financial support of the C.F.-N. is, for them, a donation to a cause.

Whether biologists today need or want the help of non-professionals in order to publish the results of their research, is another question. After nearly ninety years of growth and change within the Club, the shoe has, somewhere along the way, switched to the other foot. Today it is the non-professional naturalists who are in urgent need of the strongest kind of support from professional biologists in resolving their problems.

This brings us back to our first objective. How has the Club looked after the needs of those members whose interest in natural history stems from the delight, relaxation and inspiration derived from it? Without a doubt, there has been a lack of any real concern for the plight of this group of naturalists, who form the bulk of the local membership. It is this lack of concern that has allowed the Club to stand by, without taking action, as one after another of our local natural history haunts is wiped out.....lost not only to us, but to those who will inherit the landscape from us. Aesthetic values have been brushed aside as being secondary to academic ones, or even dismissed entirely as being of no particular importance. We suggest that this order of priorities needs to be challenged.

As naturalists, our most urgent problem today is the need for preserving areas of natural beauty within easy reach of city people. Already we have allowed our natural areas to dwindle to the point where even our most common wildflowers are unfamiliar to Ottawa children. It is scarcely possible to foster an acquaintance with what no longer exists around us. Our first objective is growing obsolete, as marshes and meadows, ravines and streams, become things of the past for city dwellers.

The objects of our Club need to be re-assessed and re-stated in the light of conditions in 1968, and with a new sense of responsibility to future generations of human beings. Today, when our natural landscape is literally being bulldozed out of existence, we can adopt no more basic, urgent and worthwhile objective than to preserve, in our own community, some areas in their natural state.....meadows where children can pick daisies and buttercups, creeks where small boys can watch pollywogs, wooded areas where wild creatures can continue to exist, and, perhaps farther away, larger nature preserves for people to enjoy, and where biologists can study.

S. C. T.

THE EVENING GROSBEAK

W. Earl Godfrey
National Museum of Canada

Looking like some brightly-colored tropical waif misplaced in the snowy Canadian winter landscape; endowed by hearsay with an aura of mystery and romance; and imbued with a robust pioneering spirit that has pushed its range halfway across a continent in less than forty years, the Evening Grosbeak, Hesperiphona vespertina, is an extraordinary bird!

Many bird-conscious people living in Ontario today (especially those who feed birds in winter and have provided outlandish sums of money for incredible supplies of sunflower seeds to satisfy numerous greedy grosbeak appetites) find it hard to realize that the Evening Grosbeak has not always been a resident of eastern Canada. Indeed, almost until the turn of the century it was one of eastern North America's rarest visitors, the sight of one an event!

On December 19, 1889, a boy knocked at the door of the home of veteran Ontario ornithologist, Thomas McIlwraith, in Hamilton. He passed two dead birds to McIlwraith who, with much surprise, instantly identified them as Evening Grosbeaks, then a bird of the far northwest. The boy explained that there was a flock on the shore of Hamilton Bay, less than a mile from McIlwraith's home. There McIlwraith found them in an extensive growth of red cedars that grew along the rough shore. They made a picture, he said, that he would have travelled many miles to see. In fact, so impressed was this experienced observer with these strange brightly-colored birds that he visited them every day for over a month!

McIlwraith in his book "The Birds of Ontario", published in 1894, goes on to tell us that he was aware of only four previous years (1854, 1866, 1871, and 1883) in which Evening Grosbeaks had ever been recorded in Ontario. His 1889 flock at Hamilton proved to be only a small part of what became by far the greatest and geographically the most extensive Evening Grosbeak

invasion of eastern North America up to that time. Large numbers of the birds were present throughout the winter of 1889-1890 at many points in Canada and the northeastern United States. In Canada it was detected eastward as far as Quebec City. Details of the event were published in various ornithological journals. After the 1889-1890 irruption, however, eastward movements of the bird became increasingly frequent and then almost regular.

The great 1889-1890 irruption apparently did not reach Ottawa for the Evening Grosbeak was not reported from here until 1897. Oddly enough, it was a visiting Englishman, instead of an Ottawan, who first detected it in the region. The circumstances are recorded by W. T. Macoun (1897, Ottawa Naturalist 11:32) as follows:

"The visit of Mr. G. Muirhead, F.R.S.E., F.Z.S., to Rideau Hall, will be remembered by all lovers of birds. While hunting for birds near Rideau Hall on the morning of the 30th of March (1897) he had the good fortune to shoot two female specimens of the rare and beautiful evening grosbeak, never before recorded in Ottawa, and seldom in any other part of Ontario."

EVENING GROSBEAK Cyril Hampson, South Edmonton, Alta.
from the National Collection of Nature Photographs

The bird continued to visit Ontario and Quebec increasingly. By 1913, it reached New Brunswick and Nova Scotia as a winter visitor.

The Evening Grosbeak was not found actually nesting in Ontario until 1920 when it was discovered breeding at Indian Bay, Lake of the Woods. With remarkable rapidity it extended its range eastward in a narrow band across Ontario and into Quebec in the 1930's (for details see James L. Baillie, 1940, The Canadian Field-Naturalist 54(2):15-25). By 1940 it was known to be nesting in New Brunswick where it is now one of the common breeding birds in much of that province. It was first ascertained to nest in Cape Breton Island in 1958 and has since been found in summer in other parts of Nova Scotia but its summer numbers are still rather sparse in the province as a whole.

Both the vernacular and scientific names of the Evening Grosbeak imply erroneously that the bird is particularly active in the evening. This misconception goes back to 1825 when the species was originally described. Its describer, William Cooper, was a New Yorker who had no field experience with the species. The type specimen was collected in Sault Ste. Marie, Michigan, by an Indian boy in 1823 and the speciman was forwarded to Cooper by an early American scientist, H.R. Schoolcraft. Schoolcraft mistakenly believed that the bird spent the daylight hours in the deep shade of evergreen forests, coming out into the open with "a singular strain" at dusk, and thus he misinformed Cooper. Its scientific name Hesperiphona (evening voice) vespertina (of the evening), as well as its vernacular name, continue to perpetuate this misconception.

However misnamed, the Evening Grosbeak is a welcome addition to Ontario's sparse winter avifauna. Many believe that widespread plantings in the East of the Manitoba maple, Acer negundo, the seeds of which are a favourite food, induced the bird to expand its range eastward. This, combined with the numerous well-stocked feeding shelves today, will doubtless assure that it will continue to visit us.

A NEW STAND OF HACKBERRY IN OTTAWA

Dan Brunton

Hackberry (Celtis occidentalis L.) is also known by the names Sugarberry, Bastard Elm or Nettle-Tree. It is anything but common in the Ottawa area, and is actually uncommon throughout its range in Canada. Even the range itself is unusual as it is found in small isolated areas in Ontario and Quebec, and only in the south of these provinces. There is also an isolated record in southern Manitoba.

It has a very distinctive appearance, especially the bark. It typically (at least in the smaller trees) has wart-like ridges standing out clearly against the smooth bark of the trunk. Although it is a member of the Elms, it has a berry-like fruit, quite unlike any of our other elms.

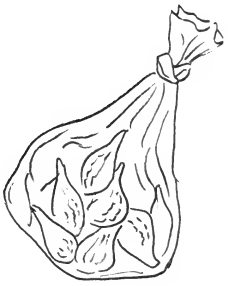
This October 23rd, Arnet Sheppard and I found three trees of this species at the woods just west of the Britannia Filtration Plant. Although on a birding trip, we noticed the odd bark of the tree and so collected leaves for identification. I brought the specimens to Dr. C. Frankton and he identified them as Hackberry. On a subsequent trip to Britannia, I was able to discover 10 trees in all, varying in size from 3 to 4 inches in circumference to over 21 inches in circumference, measured at breast height. These trees were found growing in association with Blue Beech (Carpinus caroliniana) and overshadowed by large White Pines (Pinus strobus).

Whether there are other native stands of this species still growing around the Ottawa area is not definitely known. Former sites will have to be checked out first and so possibly something can be written at a later date, after we have determined the true distribution of this interesting tree.

ORIGIN OF

Harvest without Planting

Erika E. Gaertner
Chalk River, Ontario



My interest in edible wild plants traces through my days of graduate studies in Economic Botany to my childhood when I collected mushrooms and all kinds of native berries. The proximity of the Canadian wilderness (about 50 feet from our house) has sparked an added zeal to apply my existing know-how and extend it further by experimenting both with vegetable and animal material. Acquaintance with several local trappers has made it possible to explore also the culinary potential of our fur-bearing animals. While these have always been used by native Indians and trappers, it has amused me when friends refer to my "exotic" dishes. This word, as defined in the dictionary, means "foreign or belonging to another part of the world". Thus according to this definition it is the White Man or possibly the dandelion which are exotic to Canada rather than the beaver, muskrat, cat-tails, etc.

Increasing leisure time and growing interest in the outdoors of our generation have not only increased the demand for lectures such as I have been giving for years to interested groups on survival in the bush as related to edibility of various plants and their culinary value, but have also sparked popular writing on edibility of wildlings. I became more and more concerned by their disregard to the potential danger involved when using these plants and particularly mushrooms indiscriminately. I remember how glad I was that a particularly misleading article on mushrooms appeared in February, when people could not rush out into the woods to collect them and were likely to forget about them before the next growing season came around.

Professional botanists, while most unlikely to become rich, are supposed to enjoy such bonuses offered by their profession as the unpolluted air of their out-

door workshop (provided they chose their sphere of research wisely) and the use of various plants both for an occasional nibble and food for the table. I think it was fear of misuse by the lay public and the potential danger of poisoning associated with some plants that has prevented botanists from publicizing this use. Thus several comprehensive books on the edibility of plants are available which, by their all-inclusiveness and lack of processing details, are not particularly suitable for the general public. It has occurred to me that while now this particular field was invaded by the non-specialist, the above consideration has become invalid and the only way to satisfy our conscience is not to criticize the published work but to better it. How I have succeeded in this aim is for others to judge. Because of the general attitude of the average housewife who has professed not to know enough about processing and preparing material from native sources, I have decided to include such directions in my publication. Also, only the most acceptable plants have been discussed. Because this first edition has grown out of our own family preferences, some phases are not as well covered as others, and while my file of kodachromes is considerable, the cost to include these in a book was prohibitive.

As contrasted with your editor (Mrs. G.R. Hanes) I do not have the same fear of threatening conservation by publicizing the culinary use of native vegetation and animals. Some of the plants that are easily harvested and prepared are common weeds which are troublesome in farm, forest or right-of-way. Access to the meat of our fur-bearing animals is only through a trapper who is authorized to trap them, or as I have once observed in Kingston, the purchase of meat conserves. As far as some of the other subjects are concerned, the average North American housewife is far too spoiled by the packaging industry, which eliminates most of the preparation time when getting groceries onto the table. I doubt very much that she will be ready to dig, pick and otherwise gather and process the ingredients of a meal. While she may enjoy doing this occasionally for the experience, she will not seriously endanger the plant or animal population, because the ease of gathering is, as a rule, directly correlated with their general distribution.

in Gatineau Park

Sheila Thomson

For at least five winters, we have heard not a single wolf-howl in Gatineau Park. So perhaps it is safe now to mention the wolf winter of 1961.

In our experience, signs of wolves in the Park have always been scarce.....tracks or droppings of an odd wolf, but nothing to suggest the presence of a pack. The impression that wolves have not been important in the area of the Park for a hundred years or more is confirmed by conversations with old-timers. Not one good wolf story has turned up!

Our first inkling that 1961 was to be a wolf year came when skiing friends reported that they had seen a couple of wolves on one of the lakes. Envy welled up in us. Then one February morning, while skiing to a weekend camp on the edge of the Park, we came upon the tracks of five timber wolves. More tracks were found later that day, on a hill closer to camp, and we knew we had a pack of timber wolves in our own neck-of-the-woods.

According to the books, wolves like to howl after dark. But this pack howled for us in the brilliant sunshine of a crackling cold February morning, and the effect was absolutely spine-tingling. What prompted the first wolf to throw back his head and howl is a mystery. The rest of the pack joined in one after another, each in a different key, and the wild mournfulness of it is impossible to describe. Several times they broke into a fresh chorus of howling, somewhere not far away, but out of sight. By a stroke of luck, when they finally moved off through the bush, we caught sight of two of them. A large black wolf, followed by a light-coloured one, came momentarily into view as they rounded the brow of a nearby open hill.

The wolves stayed around for the rest of that winter, and even toward the end of March we were still hearing an occasional wolf-howl, sometimes distant and eerie, sometimes fairly close and musical.

No explanation for the presence of wolves in this particular year is offered, unless perhaps the scarceness of snow enabled the deer to outrun wolves, thus forcing them to move into new areas in search of food.

Since 1961, signs of timber wolves in the Park have been disappointingly few. Most winters there is only the occasional track of a wolf, usually in remote areas, and we have listened in vain for the thrilling sound of a wolf pack howling. It seems that, for one reason or another, Gatineau Park is not true timber wolf territory.

MOCKINGBIRDS WINTERED IN OTTAWA

Sadie Landon

Two Mockingbirds wintered in Ottawa last year (1966-67) due to the generosity and watchfulness of Mrs. F.G.B. Maskell of Courtland Park, and Mrs. Ivan Wallace of Halldon Place. The bird frequenting the Wallace territory really took over -- considered all other birds as intruders, and endeavoured to put them to rout. A pair of grackles tried building a nest in a nearby tree but the mocker tore it apart as fast as it was rebuilt. He ate tomatoes, oranges, apples and bread, but after the weather moderated he desired only fruit; if the kind he desired was not on the tray he tapped on the window until he got what he wanted. On one occasion he was delighted with the grapefruit Mrs. Wallace offered.

Mrs. Maskell's bird preferred raisins, as well as the fruit of her juniper tree, and rose hips. She had to watch to prevent the cats from climbing the tree to molest him when he was feeding.

As it is understood that Mockingbirds do not migrate, Mrs. Maskell and Mrs. Wallace deserve credit for bringing the mockers through our cold winter climate.

The ONTARIO NEST RECORDS SCHEME in the Ottawa Area 1967

Bill Holland

In the May-June issue of Trail & Landscape the Ontario Nest Records Scheme was introduced, and nest record cards were made available to readers.

This scheme operates under the direction of the Department of Ornithology, Royal Ontario Museum, Toronto. Up to the end of the 1966 season, it had had eleven years of operation, with 8917 nest cards on file. Though lower than the Ontario Provincial breeding bird list of 269 species, the records scheme totals 249 species whose actual nests were found and recorded.

Within the Ottawa area, 79 cards had previously been submitted for Carleton and adjacent counties:

Carleton	38 cards	18 species
Dundas	5	4
Grenville	1	1
Lanark	-	-
Russell	22	17
Stormont	13	8

Since our introduction of the scheme in 1967, nest cards have been made for the species listed below. A word of appreciation to Joyce Dunston, Anne Hanes and Dan Brunton, whose records, with my own, make up this list; and thanks to others who sent cards to Toronto.

1 Pied-billed Grebe	1 Catbird
1 Great Blue Heron	2 Eastern Bluebird
1 Black Duck	4 Robin
4 Great Horned Owl	2 Loggerhead Shrike
2 Killdeer	1 Starling
1 Herring Gull	3 Red-winged Blackbird
1 Yellow-shafted Flicker	2 Yellow Warbler
1 Crested Flycatcher	1 Ovenbird
1 Tree Swallow	*2 Brown-headed Cowbird
1 Rough-winged Swallow	1 White-throated Sparrow
1 Black-capped Chickadee	2 Song Sparrow

*Tallied separately, in addition to host species

Totals : 36 cards : 22 species

Conservation's Hope for the Future.....

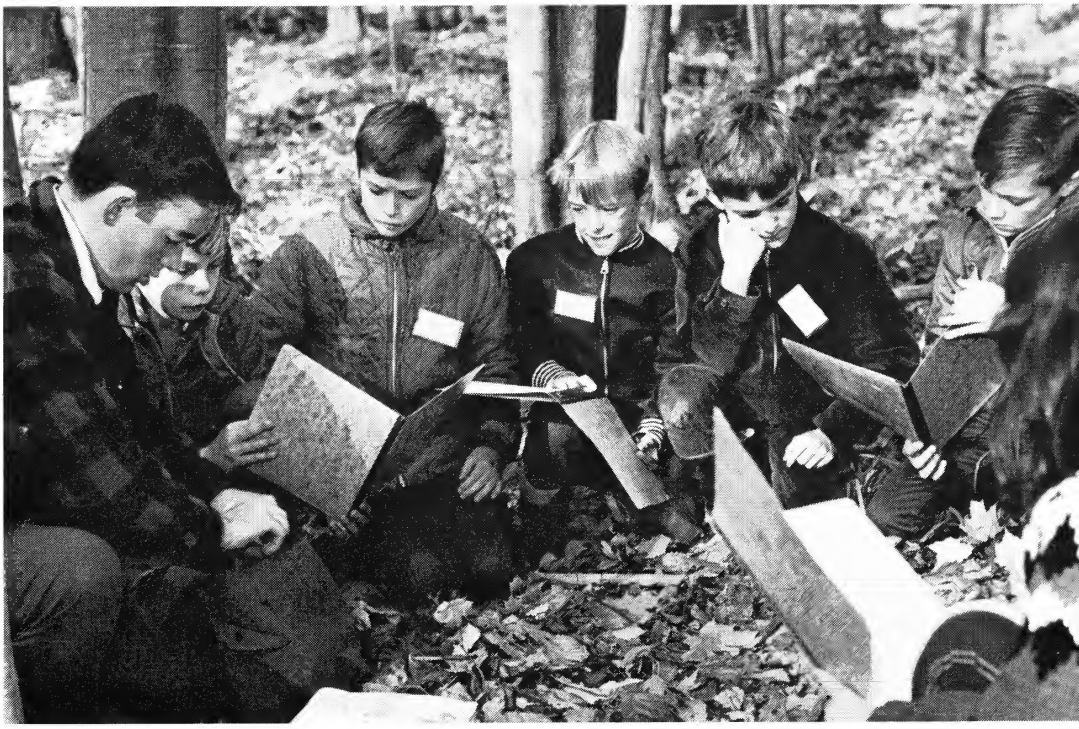
OUTDOOR *Natural Science* SCHOOL

Jeanne White

How often today do you hear adults say somewhat wistfully, "Why, it's only a few years ago that this built-up area was right in the country!" Then they recall Sunday walks, and picnics when birds sang in the marshes by the streams, where now stand huge apartment developments and offices and parking lots. Small wonder that many city children today have such little contact with the country that many young students have never seen farm animals, let alone wild ones, and have no understanding of such basic things as where milk comes from - apart from cartons in the 'frig'!

With the inevitable increase in building keeping pace with the population explosion, snow-balling out into the giant cities of the future, one can see that only by planned conservation now, before it is too late, will valuable natural areas be saved for future citizens to enjoy. Educating children to appreciate and understand the ecology of the land seems to be the only hope for a future not completely buried in cement and steel. A school with such a purpose is now in existence: the new 200-acre Outdoor Natural Science School, operated by the Ottawa Public School Board.

This Board is actually the first to take advantage of the amendment to the education act whereby school boards with student enrolment over 10,000 can purchase up to 200 acres of land outside their jurisdictions. According to Mr. David Coburn, Supervisor of Science with the Board, and Director of the School, "The real purpose of outdoor education, and of taking the children to a real situation in the out-of-doors, is to bring back part of the natural roots of their existence."



Mr. Coburn mentioned that Harvard University, with one of the finest herbaria in the world, and one of the finest biological faculties, had more than 17 fellowships in biology unused last year. He explained, "The reason for this is simply that the young people growing up in large urban centres have no contact with the out-of-doors".

The land for the school, located on both sides of Highway 17 west of Cumberland, was especially chosen to present as many varied habitats as possible. Beginning at the Ottawa River marsh, it stretches back over a flat plain, up a hillside where on top is a sugar maple bush with tappable trees, and beyond that, a forested area. In the school area are the three major types of soil found in this part of the country.

Some of the projects carried out now by Grade One to Eight pupils include the following: At the waterfront marsh is the ornithology program. Inland, surrounding an old shanty dating back to approximately 1835, are some 600 tappable sugar maple trees; here the children do all the work, from calibrating mensuration, to installing tap holes and collecting the sap. A forest area nearby has been marked as a nature trail

-"white pine trail" - Where interesting biological features are noted. The forest area is used also to set up live-traps to determine what kinds of animals are within the area. Similarly, small sections of the land are studied to get a comparison of soils and vegetation. The instructor relates the findings of these studies of plant and animal life to one another, introducing a study of ecology. On a hilltop overlooking the Ottawa River is an apiary where the children study all the intricacies and phenomena of a social insect, the bee.

Although recreation is a part of the overall picture, as when the students enjoy a taffy-pull in the snow, a scientific approach to all subjects is maintained, and scientific names are used. Mr. Coburn illustrated the depth of studies by describing the apiary at the school. "We carry out a great deal more than just examining the hive and insect in it", he pointed out "Dishes of sugar and water are set out at 100 yards distance from the hive, and using a blind and walkie-talkies, plus a stop-watch, we record the flight distance and speed of flight of bees which have been marked with plastic paint." Also observed within the hive are the dances and amazing means that bees have evolved for communicating distance and direction of sources of food.

Mr. Coburn explained that in studying the land, there are two main factors to consider: the vegetation and the animal populations. Vegetation may be studied by statistical analysis of sample quadrants in the various communities. To sample the animal community, of a meadow for example, nine 250-foot trap lines with six traps each are established at 50-foot intervals on a 400-foot baseline: 54 traps with a total grid coverage of 100,000 square feet. Assuming all animals to be equally trappable, the harmless live traps determine first what kinds of animals are within the grid, and what is the frequency of occurrence. Study of quadrants and setting of trap grids in other areas allows comparison of the vegetation of different communities and the animals that were in them. "In this way we study the ecology of the land in a manner that is impossible in the classroom" said Mr. Coburn.

The ornithology program includes establishment of a resident flock of Canada Geese, a bird-banding station, and a game birds rearing station. The children participate in all projects, becoming actively involved rather than just looking on. In the bird-banding station, said Mr. Coburn, "when a child slips the ring around the bird's leg, in this way, for a very short time, he is exposed to an international scientific undertaking, and becomes part of it".

The enthusiasm shown by the children attending classes at the Outdoor Natural Science School was echoed by the science teachers' obvious dedication to their science program. Employed full-time are two science resource teachers and a regular field technician. The students who come out to the classes on the school bus at approximately 9:30 a.m. from Tuesday to Friday each week of the school year, are accompanied by two student teachers, and by their classroom teacher who has made a pre-planning visit already. He or she will have briefed the children as to what they might expect to find. "For instance", said Mr. Coburn, "if they plan to go into the woodlot to carry out forest mensuration, the children might construct their own callipers; if they were working on a waterfowl project they might actually construct nesting boxes or floating platforms. In this way they become totally involved."

Asked about plans for the future, the Director spoke enthusiastically about hoping to be in a residential phase in 1968, "with facilities capable of supporting two classes over a 4 or 5 day stay". He mentioned how provincial and federal agencies, such as the Canadian Wildlife Service, were behind the project one hundred percent, in the realization that the future of Canadian wildlife and natural resources depends on the education and interpretation of the out-of-doors to our young people.

As the program develops, many other projects will be undertaken and present ones enlarged upon. For example in ornithology: next year the children will start hatching pheasant eggs in the classroom in an incubator. A trip will be scheduled for them so that they may come out to the School with the pheasants and place them in a brooder. When the birds are mature enough, another visit will be scheduled for the children to return and participate in the actual release of the birds to the land.

A further idea for the future, about which the Ontario Lands and Forests Department may be consulted, is to make use of the resource area of the Ottawa River to study game fish and coarse fish - kinds, frequency, range, etc. The Science School would like eventually to operate a tagging program : a capture-release technique to study some of the measurable data of these fish.

At the moment the cost of the Science School is equal to, if not slightly under, the cost of a fully-equipped gymnasium. As to its importance, in the words of Mr. David Coburn, "Science is now a core area of any curriculum. To us, this is science in reality - where a child works with the land, where earth and sky take on a predominance, where he deals with the needed vegetation and relates it to the animal population, and eventually relates himself to the whole environment of his world. We're trying to bring back the natural roots of a child's existence".

With educators like this, there may be hope yet for conservation!

SALAMANDERS OF THE OTTAWA DISTRICT

Francis R. Cook
National Museum of Canada

This is the first of a series for Trail & Landscape intended to provide a succinct guide to the amphibians and reptiles found in the Ottawa District. Each species is listed by its common and scientific names, and characteristics and distribution of Ottawa District populations are outlined. Species designated "rare" may actually be locally abundant but usually are secretive. It would be appreciated if any records of rare species were reported, accompanied if possible by a confirming specimen. The writer may be contacted on weekdays at the Museum at 996-1755, or preferably by letter during the spring and summer field seasons. A comprehensive guide to the amphibians and reptiles of the Ottawa District is in preparation for eventual publication as a National Museum of Canada bulletin.

Class AMPHIBIA: The amphibians are placed midway between the fish and the reptiles in the evolutionary scale. They are ectothermal, that is, their body temperature is controlled by their external environment. They have soft and glandular skins and generally lack scales. Amphibian eggs lack a shell and must be laid in water or in moist conditions. There are approximately 2100 species in the class; 42 have been recorded from Canada.

Order CAUDATA, Salamanders and Newts: Superficially a salamander resembles a lizard, and indeed the two are often lumped together under the latter name by the layman. Salamanders, however, are easily distinguished by their soft, moist skins which lack the scales that all lizards possess. There are some 280 species of salamanders in the world and the center of their distribution is North America where seven of the eight recognized families occur; three of these families are restricted to North America.

Eight, possibly nine, species have been collected in the Ottawa District and the presence of one of them, the Greater Blue-spotted Salamander, is here noted for the first time. They represent a varied group in adaptation and habits. Though the typical amphibian is

thought of as developing from an egg laid in water, through a gilled larval form, into an adult breathing by lungs, striking exceptions are presented by our limited fauna. The Mudpuppy retains the normally "larval" gills throughout life. The Red-backed Salamander lays its eggs on land and the young pass the larval stage within the egg, hatching as air-breathing miniatures of the adult. One family, the Plethodontidae, lacks lungs; respiration is accomplished through the moist skin and the highly vascularized roof of the mouth.

It should perhaps be noted that the name "newt" applies to one particular group of salamanders, whereas "salamander" is the all-inclusive term for the order.

Family Proteida, Mudpuppys, Water Dogs and the Olm of Europe

MUDPUPPY, Necturus maculosus maculosus

Our largest salamander, adults grow to 12 inches and often larger. The back and sides are brownish with darker spots. The red filaments of the plume-like external gills are conspicuous on each side of the head; it is our only species that retains gills as an adult. There are four toes on each hind foot; all other salamanders in our area, except the small Four-toed Salamander, have five. Common, particularly in the Ottawa and Rideau Rivers and the Rideau Canal where they are taken with hook and line in the winter, often to the amazement of ice fishermen. The young are black above with yellow longitudinal stripes.

Family Salamandridae, Newts and the Old World Fire Salamander and its allies

RED-SPOTTED NEWT, Notophthalmus viridescens viridescens

Adults attain a length of four inches and are brown or green above, peppered with small black spots, and usually have a row of black-bordered red spots on each side. The underside is yellow and also has black spots. The immature land phase, the eft, is red above and below; it has the black-bordered red spots of the adult but usually fewer black spots. The aquatic adults are often common in woodland ponds and small lakes. The eft is found under stones, logs and similar cover in the woods although eft-colored individuals may sometimes also be taken in ponds. The larvae are small and have well-developed external gills and a dark line through the eye (also present in adults) which distinguishes them from other pond larvae.

Family Ambystomatidae, Mole Salamanders

BLUE-SPOTTED SALAMANDER, Ambystoma laterale

This bluish-black species attains a maximum length of $5\frac{1}{2}$ inches. Numerous blue spots or flecks are present on the sides and underparts. It is abundant in the Ottawa Valley but apparently is rare in the Gatineau area. Early spring, soon after the ice melts from the woodland ponds and roadside ditches, is the breeding period and individuals may be found at this time of year after dark by searching pond margins with a flashlight or headlamp. The remainder of the year is spent underground but it may occasionally be found by turning logs, stones and similar cover. The larvae are greenish or yellowish in color.

GREATER BLUE-SPOTTED SALAMANDER, Ambystoma tremblayi

Slightly larger than the preceding species which it closely resembles, the maximum size of this form is about $6\frac{1}{2}$ inches. It is somewhat lighter with less blue spotting. This is a triploid species which is invariably female. It reproduces by "breeding" with A. laterale males but their sperm serves only to initiate cell division and the resulting young are always triploid females identical in genetic composition to their mother. It may be positively distinguished from A. laterale only on the basis of chromosome counts (half again as many chromosomes), cell size (larger) and the number of enlarged ovarian eggs in breeding females (fewer at equal body lengths). Habitat and habits are similar to the preceding species.

(YELLOW) SPOTTED SALAMANDER, Ambystoma maculatum

A large black salamander, up to eight inches in total length, with bright round yellow spots on the head, body and tail. It is abundant in the Gatineau area but rare or absent over much of the Ottawa Valley. Breeding time, general habits and larvae are similar to the preceding two species.

Family Plethodontidae, the lungless salamanders

RED-BACKED SALAMANDER, Plethodon cinereus cinereus

Individuals of this form may reach $4\frac{1}{2}$ inches. Two distinct color phases occur in the Ottawa District: (1) black sides, broad red dorsal stripe; (2) black

dorsally as well as on the sides (Lead-backed phase). The underside in both phases is marbled with black and white. (Do not confuse young Blue-spotted Salamanders with the Lead-backed phase; the former are distinguishable by their blue spots.) It is common in good woodland, but its known occurrence appears scattered, perhaps due to some extent to destruction of good habitat but also to insufficient collecting. It is found under and in rotting logs, under stones, bark or leaf litter. The eggs are laid in moist situations (commonly in rotting logs) on land and the larval stage is passed within the egg. The newly hatched young is a miniature of the adult. The tail is easily broken but it will regenerate in time, a phenomenon common in salamanders.

FOUR-TOED SALAMANDER, Hemidactylium scutatum

This little reddish-brown salamander reaches a length of about 3 inches. The milk-white underside with conspicuous black dots will positively identify any specimen. There are four toes on each hind foot. It is rare, and is known in the District only from a few localities in the Gatineau area. The eggs are deposited in sphagnum moss overhanging pools; the larvae drop into the water to complete their development after hatching. It may wander from sphagnum bog pools after the breeding season and be found under litter in damp wooded areas.

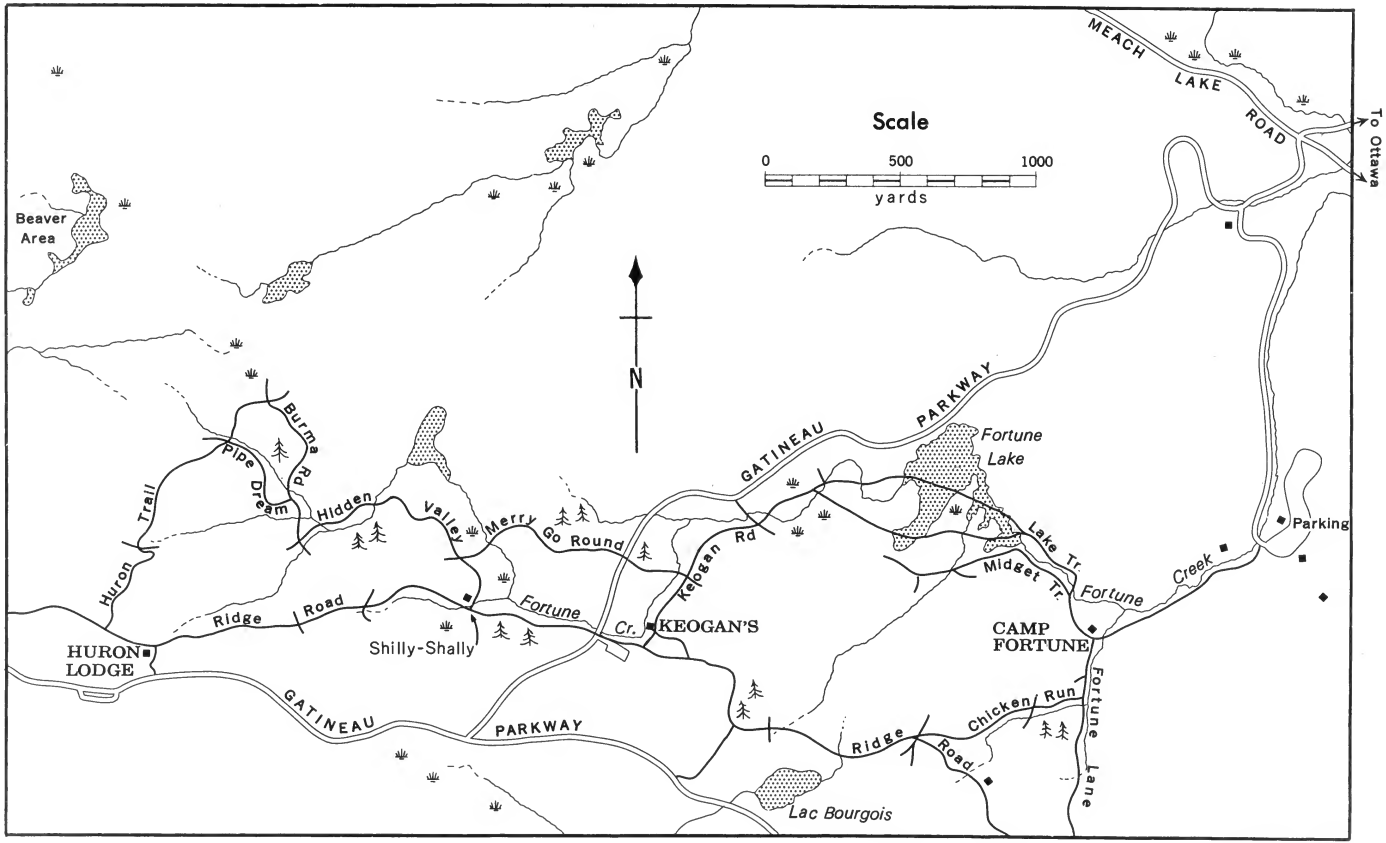
NORTHERN TWO-LINED SALAMANDER, Eurycea b. bislineata

A small light brownish-yellow salamander, rarely exceeding 4 inches, with two dark lines, one down each side of the back. Between these, and on the sides, there are irregular dark flecks. The yellow, unmarked underside is distinctive. It is common, and most often found under stones at the edges of streams and smaller rivers. The larvae have short gills and hide under stones in the water.

NORTHERN SPRING SALAMANDER, Gyrinophilus p. porphyriticus

A large salmon-red species with darker mottling; it may grow to a length of $7\frac{1}{2}$ inches. A light cream-colored line is present from the eye to the nostril. There is only a single record of its occurrence in the Ottawa District. Its presence must be considered questionable and it probably should be deleted from the local list.

SKI TRAILS



H.A.Thomson

Explorer's Corner.....

..on the Ski Trails..

Michael MacConaill

Winter is not the time to retreat indoors, but a chance to explore under different and maybe more favourable conditions. So dress warmly, get out your skis or snowshoes, and off to the woods where marshes and puddles are frozen and you can go anywhere without fear of getting lost - for your tracks will always guide you back the way you came.

Here in Ottawa we are particularly fortunate that over the years the enthusiasts of the Ottawa Ski Club have developed a network of trails to make many of the intriguing beauties of the Gatineau Park more easily accessible. Huron Lodge, about two and a half miles west of Camp Fortune proper, makes a convenient centre for an interesting excursion over these trails.

To get there from the parking lot of Camp Fortune make your way westwards along Fortune valley to the Camp Fortune Lodge, and then up Fortune Lane. Just before this trail starts to climb sharply around a high bluff, turn right on the Chicken Run, and ascend gradually beside the creek. After a third of a mile, you reach Journey's End, the meeting point of several trails on a little saddle; this is a watershed between streams flowing to the Gatineau and Ottawa Rivers. Here you may be attacked by tame chickadees seeking their accustomed largesse of sunflower seed.

From this point, follow Ridge Road westwards for three-quarters of a mile to meet the Gatineau Parkway. Ridge Road was once the main access to all the Irish settlements spread along its original five mile length from Kingsmere to McCloskey's farm. Just before reaching the clearing marking the summertime parking area, Keogan Lodge can be seen a hundred yards to the right, perched above Fortune Creek. Outside this lodge, bird feeders with suet and sunflower seed attract many feathered visitors.

Photo by F. Chapman

Another third of a mile beyond the Parkway brings you to Shilly-Shally, nestling cosily below a high rock. This is where for many years Rosemary Gilliat spent her winter weekends, attracting and photographing chickadees, nuthatches, woodpeckers, - not forgetting that cheeky brigand, the red squirrel. So tame did the chickadees become that they were known to eat right out of a visitor's mouth, and even to go hunting for seeds in pockets and packsacks.

Onwards and upwards the trail winds, through the narrow defile of the 'Khyber Pass' to reach the upper plateau, and level going as far as the attractive Huron Lodge. This is a convenient spot to eat lunch and relax for a short while.

After lunch, the homeward trip takes a new route. Continue west on the Ridge Road for a further two hundred yards, climbing at an angle across a twenty foot high fault scarp; then turn right on Huron trail.

Follow this across the Hidden Valley; to your left now is an area extending half a mile northwest laced with a multitude of small beaver ponds. The trail continues down a small valley to meet the Pipe Dream. Turn right on this, and follow it to join the Burma Road for some hundred and fifty yards before turning left on the Hidden Valley and following it down between the high ridge on the left and an evergreen swamp on the right. All this way, you may at any moment come round a corner and find two or three deer running across or even along the trail.

When you reach the Merry-Go-Round, you have the choice of either turning left and following it to meet the Keogan Road just north of Keogan Lodge, or returning to Shilly-Shally by the Hidden Valley. In all the area west of the Parkway, be prepared for an explosion underfoot in soft snow as a ruffed grouse takes off like a rocket at Cape Kennedy.

From Keogan Lodge, you can follow the Keogan Road along the edge of Fortune Creek; on reaching the open expanse of Fortune Lake proper, keep along the south shore to the outlet where a concrete structure has replaced the old beaver dam. From here, you can return to Camp Fortune by either the Lake Trail on the north or the Midget trail on the south, while watching the descent of Fortune Creek between these two trails. All along the south shore of Fortune Lake are stands of Viburnum (often known as Dogwood in the area). Look up in the trees at the point jutting into the lake near the dam: there is an Osprey's nest perched on high.

The complete trip from the parking lot to Huron Lodge and back is seven miles, and can be spread over a whole day; to go only as far as Keogan Lodge reduces it to three miles, and a pleasant afternoon outing. Bring along your binoculars, and your December TRAIL & LANDSCAPE if you like to play Sherlock Holmes and identify the many winter travellers from their tracks in the snow; and don't try to walk in boots alone through a foot or more of snow: it is far too strenuous to be enjoyable, and the potholes made by walkers create a real danger to the skiers who maintain this trail system. Even the smallest 'bear paw' snowshoes will keep you from sinking in and make your trip so much more enjoyable.

Letters . . . .

Editor, T & L,

Ever since receiving my copy of the first issue of TRAIL & LANDSCAPE I have been meaning to send to you my congratulations upon the start of this fine little journal and my best wishes for its real success.

The interest in Conservation that your editorship displays is most encouraging. I trust that the OFNC will now be in the forefront of local efforts in this field and will lend its full support to the necessary job of river conservation.

Robert Legget
531 Echo Drive, Ottawa 1

Editor, T & L,

The letter by Mr. Norm Buck...covered most points I planned to make regarding Mr. Bourguignon's defense... Several points I would like to add are below:

Although Mr. Bourguignon is to be commended for his fine collection and for allowing interested persons to view it, I question what he evidently considers his right to take a rare bird, and also his reasoning. To suggest that only by stuffing something is one given definite proof it ever existed in a certain place is almost laughable. In a similar situation, I trust the word of anthropologists that they have observed some rare human is taken as reliable! Would the word of one or two qualified ornithologists that a certain bird has been sighted be less reliable?

As a new member of the OFNC I find it disturbing to feel that one must be very secretive about one's bird "finds" lest an overly ardent collector consider it rare.

Finally, I feel the authorities who give permits to shoot birds should ensure that those collected are outside city, greenbelt and all other protected areas.

Jeanne White
130 Belmont Ave., Ottawa 1

to the Editor

Editor, T & L,

Once again, another small, sharp, succulent and succinct issue of TRAIL & LANDSCAPE has penetrated my ivory tower. Though long procrastinated I must tender my long overdue hurrahs for your effort. Not, mind you, that I think everything you have printed between these sky-blue covers is a gem, nor that I have hung on every word. However, though virtue is its own reward, congratulations on the general format and content. I realize too well how seldom anyone other than those few who make an editor's job possible will take the effort to express their personal assessment on the merit of any publication except to murmur meaningless blanket benedictions or to pick perversely at some picayune point.

I am glad in particular to see, despite that vocal ultra-narrow element in our venerable organization who seem to join mainly to snipe and snicker at the professional and try, if not to drive him out, at least to impress him with the fact that they don't need him, some indication, even though trotted out with pristine self-consciousness and late second-guessing, in your article "A Fresh Approach to Eating" that at least someone may still dare in the New Field-Naturalists era to intimate that conservation, like temperance, does not mean abstinence.

Francis R. Cook
441 Echo Drive, Ottawa 1

THANK YOU READERS!

The editors are very grateful to those who have volunteered to do some of the non-editorial work of producing T & L. We wish to thank all of you who offered us your help.

Don't forget that T & L is intended to be by as well as for members. If you have in mind an article, item or illustration for our journal please send it along -- don't wait for an editor to receive it by telepathy!

Common Name	Scientific Name	Location	Nominator	CBH	Ht.	CD	Big.
Basswood	Tilia americana	Billings Br.	A. Hanes	108	82	32	198
Black Cherry	Prunus serotina	West Hull Twp.	H.A. Thomson	66	48	52	127
Hackberry	Celtis occidentalis	Billings Br.	W.G. Dore	93	69	48	174
Red Maple	Acer rubrum	Gatineau Pk.	A. Hanes	100	88	40	198
White Pine	Pinus strobus	West Hull Twp.	G.R. Hanes	117	84	60	216
White Pine	Pinus strobus	Onslow Twp.	E. Mulligan	164	80	54	257
Balsam Poplar	Populus balsamifera	Onslow Twp.	E. Mulligan	154	47	40	211
Red Oak	Quercus borealis	West Hull Twp.	H.A. Thomson	162	61	58	238

CBH...circumference, breast height (inches); Ht...height (feet); CD...crown diameter (feet). Bigness number is obtained by adding CBH plus Ht. plus $\frac{1}{4}$CD.

This is the second in a series of Big Tree listings. The first list appeared in the Sept.-Oct. (1967) issue of T & L. For those who "tuned in late", members are invited to bring to our attention the location of very big trees of any species in the area, with the ultimate aim of naming the champion tree of each species in the district. Send in your nominations to Harry Thomson (234-0845) or Gary Hanes (749-2400). If the tree you nominated does not appear above, please be patient. We'll get around to taking its measurements for next listing.

O. F. N. C.

Coming Events

Thurs. 25 Jan. STUDYING BIRD MIGRATION WITH RADAR

A lecture with motion pictures and slides describing studies of bird migration over western Canada in spring, using radar tracking. This relatively new technique is providing observations never before possible.

Speaker : Dr. T. M. Myres, University of Calgary
Place : Auditorium, National Museum
Time : 8:00 p.m.

Sat. 27 Jan. WINTER BIRD OUTING

A search for typical winter resident birds, hopefully including Snowy Owls.

Leaders : Ron Pittaway and Monty Brigham
Meet : Health & Welfare Bldg.
Time : 8:00 a.m. (trip lasts until noon)

Tues. 30 Jan.
Tues. 6 Feb.
Tues. 13 Feb. BIRD RECOGNITION LECTURES

A repeat of last year's successful and useful series, intended to assist new birdwatchers to identify the species reasonably frequent in the Ottawa area. The content of each lecture is flexible, depending on audience interest: the tentative plan is two sessions in visual recognition (with slides) and one on bird songs and calls (with recordings).

Speaker : George McGee
Place : Macoun Club Room (359) National Museum
Time : 8:00 p.m.

Sat. 24 Feb. CROSS-COUNTRY SKI TRIP, GATINEAU PARK

An all-day nature trip on skis to see the country in winter, with special attention to animal tracks. Bring a lunch to eat at a campfire on the snow.

Leader : Harry Thomson (234-0845)
Meet : Health & Welfare Bldg.
Time : 8:30 a.m.

Thurs. 29 Feb. COLOUR SLIDE SHOW - "THE SEASONS"

A selection of colour slides with running commentary to show changing aspects of nature, especially plants, through the year in the Ottawa region.

Speakers : Mr. & Mrs. A. E. Richards
Place : Macoun Club Room (359) National Museum
Time : 8:00 p.m.